DIGITAL NETWORK AVIONICS (DNA)

Mission Superiority in a Multi-Domain Environment

Elbit Systems
Aerospace

Transforming the Aerial Battlefield

Today's multi-domain aerial battlefield is a complex and challenging combat environment. Access into more and more territories is becoming increasingly difficult, due to Anti-Access/Area Denial (A2/AD) challenges. The growing use of network-centric warfare (NCW) is both expanding the fighting power of opposing fighting forces, and improving the precision of their data. Furthermore, advanced electronic warfare and cyber threats affect communications and operability, adding an additional layer of complexity. Survivability and lethality in this extreme arena rely heavily on the ability to gather maximal information, generate a comprehensive situational picture, and share it among all forces. However, when considering the various challenges, along with the fact that targets are becoming increasingly time sensitive, it is almost impossible to obtain a clear situational picture.

Cutting Edge Innovation Based on a Holistic Approach

Delivering clear, analyzed data and AI-based recommendations to all users through intuitive tools, Elbit Systems' Digital Network Avionics (DNA) ensures superiority in the face of these ever-advancing operational challenges. Through groundbreaking innovation and a game-changing holistic approach, DNA equips aircraft and provides pilots with next-generation avionic capabilities that far surpass even the most advanced solutions used today. The various elements of DNA truly sit at the cutting edge of aerial technology, connecting, fusing, and analyzing the complex multi-data environment, to provide definitive, clear, and intuitive information that enables pilots to make optimal decisions, quickly.

Key Operational Benefits

- Increased Survivability
- Increased Lethality
- Advanced Live Training
- Reduced Pilot Workload
- Reduced Operational Flight Program (OFP) Turnaround Time
- Improved Multi-Domain Connectivity

DNA incorporates various products, applications, and capabilities to support a holistic approach

- Next Generation Capabilities
- EO DAS
- TF/TA Capabilities
- AI-Driven Decision Support Systems
- Joint Force Connectivity

The holistic DNA concept is constantly being developed and improved by Elbit Systems' state-of-the-art, innovative Digital Engineering Lab